

### **REMARKS**

Applicants would like to thank the Examiner for discussing the present case with Applicants' representative. Applicants note that in the telephonic interview with Examiner Khan, September 12, 2006, the PTO presented Applicants with the option of amending the claims to include the transitional phrase of "consisting essentially of" in place of "comprising". Additionally, the PTO presented Applicants with the further option of amending the claims to read "neutralizing in a basic wash bath and forming a neutral fabric whereby the potential for reaction reversal and polymer washout is eliminated to step c" with a further search to follow.

Applicants respectfully decline to exercise the options presented by the PTO since the options would limit that which Applicants believe to be their invention. An applicant is free to claim that which is believed to be the invention limited by the prior art. Applicants contend that the cited prior art either alone or in combination fails to teach or suggest that which is claimed in the present application. The following Remarks and accompanying Declaration further demonstrate that the cited art fails teach or suggest that which is claimed in the present application.

Claim 1 is currently pending in the present application.

### **REJECTIONS UNDER 35 U.S.C. § 102(b):**

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by the articles ("Vigo articles") entitled "Multipurpose woven cotton and cotton/polyester blends containing cross-linked polyols affixed by a low temperature cure" and "Improvement of various properties

of fiber surfaces containing cross-linked polyethylene glycols.” The rejection is said to be for the reasons set forth in the Office Action dated December 23, 2005.

Claim 1 further stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Nos. 4,908,238 and 4,851,291 each to Vigo et al. in the present outstanding Official Action. While the Vigo et al patents do not explicitly teach the step of neutralizing the treated fabric as claimed in the present application the PTO holds that washing with running water and detergent would inherently provide neutralization of the fabric.

The cited Vigo articles and Vigo et al. patents will be addressed collectively as the "Vigo references" since the disclosures in each are substantially similar and the grounds for rejection are substantially the same for each. Specifically, the Vigo references do not explicitly teach the claimed neutralization step of the present application of neutralizing the treated fabric to a pH between about 6.5 to about 7.5 to form a neutralized fabric. However, the PTO has held that the Vigo references inherently teach neutralizing the fabric by teaching washing the fabric in running water and detergent.

### **Anticipation**

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Vigo references fail to teach each and every element as set forth in the claim of the present application. Specifically, Applicants' claim step of neutralizing the treated fabric to a pH between about 6.5 to about 7.5 to form a neutralized fabric is not taught in the Vigo references. Within the Official Action the PTO fails to assert in the Official Action that the Vigo references

teach such a limitation inherently by teaching "...washing with running water and detergent would inherently provide neutralization of the fabric." Page 4, Paragraph 9.

### Inherency

If the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is "inherent" in its disclosure. However, to support such an inherency rejection the PTO must provide a basis in fact or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art. MPEP 2112 citing *Ex parte Levy*, 17 USPQ2d 1461. The PTO has failed to provide any technical reasoning or basis in fact as to why "...washing with running water and detergent would inherently provide neutralization of the fabric." The outstanding official action merely states that washing in detergent and water neutralizes a fabric. Applicants respectfully contend that the PTO has failed to support its burden of proof in asserting inherency by failing to provide any basis of fact or technical reasoning why soap and water would neutralize the fabric as is claimed in the present application. Applicants request that the inherency rejection of claim 1 be withdrawn for failure to provide any fact or technical reasoning.

Applicants further note for the missing element to be inherent it must be necessarily present. Inherency requires more than a possibility that a characteristic may occur; inherency require that a characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Furthermore, the PTO must provide extrinsic evidence that the missing element must necessarily be present. As shown above, the PTO has failed to provide any evidence that such is the case. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in

the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). The burden of proof of inherency requires that the missing element necessarily be present in the cited reference and not that it may occur. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Applicants respectfully content that the PTO has failed to show that "...washing with running water and detergent would inherently provide neutralization of the fabric" necessarily neutralizes a fabric as is claimed in the present application and the present rejection should be withdrawn.

Applicants further provide the following technical reasoning to support in part that washing with running water and detergent would not necessarily neutralize the treated fabric to a pH between about 6.5 to 7.5 to form a neutralized fabric as is claimed in the present application. Soap is made from acidic oils and an alkaline solution. The acids and bases neutralize each other and a salt forms in the process. A detergent is a cleansing substance that acts similarly to soap but is made from chemical compounds rather than fats and lye. Detergents are essentially surfactants that do not neutralize an acid. Detergents act as wetting agents.

Acids are neutralized by the addition of a base. The Brønsted-Lowry definition of a base is a substance that accepts a proton. Detergents contain molecules that enable them to be soluble in water and attract oil and dirt to them. Detergent molecules clean by attracting themselves to dirt via the oleophilic (oil attracting) end. The dirt is surrounded by hydrophilic (water attracting) ends which allows it to be wetted and carried away by water. Detergents are not a neutralizing agent.

The Vigo references do not teach or suggest the neutralization step claimed in the present application and thus the references do not anticipate that which is claimed in the present application. Applicants thus request the present rejection be withdrawn.

### Unexpected Results

The neutralization step in the present application is critical and unrecognized by the Vigo references as a needed or necessary step in the process. Neutralization sets the formulation in the fabric. Without the performance of the neutralization step, the formulation leaches out of the fabric and renders the garment or product useless.

The Vigo references teach the step of using an acid catalyst. The fabrics treated in the Vigo are acidic and remain so, since washing with soap and water does not neutralize a fabric. Vigo teaches using the acid  $MgCl$  to insolubilize the polyol. If the acid is not neutralized the reaction will reverse and pooling will result. Additionally, the acid will become hydrolyzed which will further results in pooling. Hydrolyzed  $MgCl$  results in the hydrogen ions and chlorine ions combining to form a strong acid ( $HCl$ ), with the  $Mg$  ion and hydroxide ions forming a weak base. The fabric must be neutralized to prevent the hydrolysis of the acid residue. The accompanying Declaration further attests to such unexpected results of the claimed neutralization step of the present application. Thus, the cited prior either alone or in combination does not teach or suggest that which is claimed in the present application.

The Vigo references do not recognize the result of neutralizing the treated fabric. As noted earlier, Vigo merely washes the fabric and does not neutralize the fabric. Washing the treated fabric removes that part of the PEG formulation that does not react and bond to the fabric.

Washing the fabric and removing the unreacted PEG formulation improves the appearance, hand and drape of the fabric. Additionally, washing in a mild detergent softens the harshness of the matrix structure of the fabric after the application and bonding of the PEG formulation. The Vigo references fail to teach or suggest the need for neutralizing the treated fabric.

### **Response to Applicants' Arguments**

The PTO states that declarations under 37 CFR 1.132 are insufficient to overcome the present rejections since declarations under 37 CFR 1.132 are not sufficient to overcome 35 USC 102(b) rejections. The PTO cites MPEP2131.04, 706.02(b) and 716 in support of the assertion.

Applicants respectfully note that the 37 CFR 1.132 Declarations were presented in support of overcoming a 35 USC 102(b) inherency rejection. The same is true for the accompanying Declaration. As noted earlier, the prior art does not explicitly teach the claimed step of neutralizing the fabric as is recited in the present application. Applicants have submitted the declaration to rebut the PTO's inherency assertion by showing that the prior art products do not necessarily the characteristic of the claimed process. "Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product." *In re Best*, 195 USPQ 430, 433 (CCPA 1977). See also MPEP 2112.01. Applicants provide further support that such Declarations are proper for overcoming a 35 USC 102(b) in citing *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997). MPEP 2112. In the *Schreiber* case the Board had remanded the case to the examiner to consider the declaration submitted for overcoming an inherency rejection.

Thus, Applicants submit that the Declarations are proper and sufficient for overcoming an inherency rejection under 35 USC 102(b). Furthermore, the present Declaration further clarifies

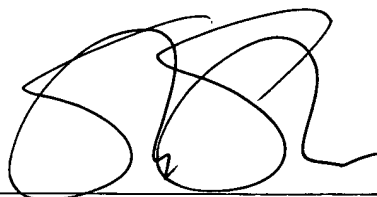
that the technology taught in the Vigo references results in pooling while the claimed method does not; the Vigo technology produces a product having a low pH while Applicants claimed method produces a neutral fabric; and the Vigo protocol was followed exactly as is taught by Vigo.

Applicants respectfully assert the prior art either alone or in combined does not teach or suggest that which is claimed in the present application.

### CONCLUSION

Applicants respectfully contend that claim 1 is allowable and an early notice of such effect is earnestly solicited. Should the Examiner have any questions or comments regarding the foregoing Response, she is invited and urged to telephone the undersigned attorney.

Respectfully Submitted,



Steven L. Schmid  
Registration No. 39,358

Steven Schmid  
1824 Hickory Trace Drive  
Fleming Island, FL 32002  
Tel: (904) 807-5522  
Fax: (904) 212-0167

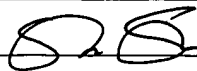
---

#### Certificate of First Class Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

10 / 11 / 06

Signature: \_\_\_\_\_

  
Steve Schmid